

09/346,194

MS126578.01/MSFTP238US

REMARKS

Claims 2-17, 19-26 and 28-39 are currently pending in the subject application and are presently under consideration. Claims 30-39 have been cancelled herein as the Advisory Action (dated November 12, 2004) contends that amendments made in the Reply to Final Office Action (dated August 13, 2004), in response to the rejection of claims 30-39 under 35 U.S.C. §112, second paragraph, requires the Examiner to perform a new search. A version of all pending claims is found at pages 2-7 of the Reply. Favorable reconsideration of the subject patent application is respectfully requested in view of the comments herein.

I. Rejection of Claims 2-3, 23-26 and 28 Under 35 U.S.C. §103(a)

Claims 2-3, 23-26 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Okita *et al.* (US 6,225,998 B1) in view of Bacon *et al.* (US 6,430,538 B1). This rejection should be withdrawn for at least the following reasons. Okita *et al.* and Bacon *et al.*, either alone or in combination, do not teach or suggest each and every limitation set forth in the subject claims.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) *must teach or suggest all the claim limitations*. See MPEP §706.02(j). The *teaching or suggestion to make the claimed combination* and the reasonable expectation of success *must be found in the prior art and not based on the Applicant's disclosure*. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

Independent claims 2 and 23 similarly recite: creating a data table in a server database, creating a workflow table in the server database, wherein the workflow table is associated with the data table, wherein each row in the workflow table represents a workflow step containing workflow rules and associated code defined by script functions,

09/346,194

MS126578.01/MSFTP238US

receiving a data modification request in the server database, invoking a workflow engine using server database triggers, and evaluating a condition and executing an action for at least one workflow step. It is apparent that the invention as claimed provides for the creation of two tables in a server database - a data table and a workflow table. In addition, the subject claims recite that the two tables that are created in the server database are associated with one another. Further, the recited claims provide that the workflow table, in addition to being associated with the data table, also contains workflow rules and associated code defined by script functions, such that the workflow rules and associated code are organized as rows within the workflow table. Moreover, in applicants' claimed invention, upon receipt of a data modification request in the server database, the computer system on which the claimed invention executes invokes a workflow engine that utilizes server database triggers to evaluate a condition and execute an action for at least one workflow step. Neither Okita *et al.* nor Bacon *et al.* teach or suggest these exemplary features of the claimed invention.

Okita *et al.* discloses a system, method, and article of manufacture for displaying visual primitives of a transaction through a transaction processing system. (See Abstract). The instant Advisory Action (dated November 12, 2004), states that Okita *et al.* teaches a database server at col. 4, lines 62-63, and further posits that "in database systems, all information is stored in the form of tables." Applicants' representative does not disagree with the fact that Okita *et al.* provides a database, and that in database systems all information is stored in the form of tables. However, the point at issue is neither the fact that a database is merely disclosed in Okita *et al.*, nor that all information in a database system is typically stored in the form of tables, but rather that the invention as claimed provides for the creation of two distinct tables in the server database, and that the two tables that are created in the server database are associated with one another. Okita *et al.* does not teach or suggest this particular aspect at the passages indicated in either the Final Office Action (dated August 13, 2004) or the instant Advisory Action. Rather it appears from the noted passages that Okita *et al.* discloses the compilation of workflow diagrams to create a single routing table, wherein the routing table comprises routing instructions and routing procedures.

09/346,194

MS126578.01/MSFTP238US

In addition, the Advisory Action asserts that Okita *et al.* teaches defining and generating (creating) routing tables where each table defines (creates) a workflow at col. 1, lines 31-37 and lines 48-55. While applicants' representative agrees that the noted passage utilizes a routing table that defines a workflow for describing how telephone calls and other transactions are distributed to agents, the fact remains that the cited passages only discloses the creation of one table – the routing table. The claimed invention on the other hand teaches *creation of two tables in the server database – a data table and a workflow table*. Moreover, the invention as claimed recites that *the data table and workflow table are associated together*. Okita *et al.* in contrast discloses only a single table – the routing table – that defines a workflow (not a workflow table). Thus, applicants' representative is puzzled as to how Okita *et al.*, since it only discloses one table, can associate the disclosed routing table to a second table that the cited document does not teach or suggest.

Further, the Advisory Action argues that Okita *et al.* specifically discloses receiving a data modification request in the server database, at col. 1, lines 40-55, because the Examiner deems the noted passage to teach “editing or modifying the routing (workflow) tables in the server”. However, the cited passage, fails to teach or suggest *receiving a data modification request in the server database*. Rather, Okita *et al.* discloses that software tools may be used to create various components; that because different users have different transaction flow requirements the system for each user may become a confusing mosaic of interdependent applications, each created and maintained by different software tools; that multiple software tools increase the difficulty in coordinating workflows across distributed execution environments; the generation of routing tables or routing procedures to control transaction flows requires computer programming skill; specific training is required to learn how to generate routing tables; and specialized knowledge and training is required to generate routing tables and to edit or modify existing routing tables. Nowhere in the indicated passage is *receiving a data modification request in the server database* taught or suggested.

The Advisory Action further contends that Okita *et al.* discloses, albeit not explicitly, *invoking a workflow engine using server database triggers*, at col. 10, line 55-col. 11, line 2, the Examiner's rationale being that because Okita *et al.* suggests that

09/346,194

MS126578.01/MSFTP238US

workflows are initiated by modifiable event triggers, the workflow system disclosed by the cited document must therefore use some sort of workflow engine. Applicants' representative disagrees for the following reason. Okita *et al.* discloses an application workflow editor, rather than a workflow engine. An engine is a program that performs a core or essential function for other programs, i.e. the engine coordinates the overall operation of other programs. An editor, on the other hand, is generally understood to be a standalone computer program that allows a user to enter, change and store data. In conformance with the generally accepted connotation of an engine, the invention as claimed utilizes a workflow engine to: invoke a script engine; compare data change information with a workflow definition contained in a workflow table loaded into the workflow engine; determine the appropriate step that needs to be executed; check the appropriate execution permissions on the determined step, if execute permission is granted, evaluate the step condition, and if the determined step condition is true, execute the step action. See page 10, lines 16-26. Okita *et al.*, in contrast, discloses a workflow editor that provides a workflow diagram containing visual primitives of a transaction flow through a transaction processor to either a serializer or a CCT compiler. Thus, the cited document, apart from utilizing a workflow editor to generate, edit and display various types of workflows that define the operation of a transaction process, does nothing more than provide a workflow diagram to a serializer or a CCT compiler.

With respect to the Examiner's contention that because Okita *et al.* suggests the initiation of workflows by modifiable event triggers, the cited document must therefore use some sort of workflow engine. While applicants' representative recognizes that Okita *et al.* must implicitly utilize a facilitating mechanism to achieve its ends, the fact still remains that the indicated passage, viz. col. 10, line 55-col. 11, line 2, fails to even intimate the use of an engine as would be understood by one cognizant in the art. Moreover, the invention as claimed utilizes server database triggers, rather than event triggers as disclosed in Okita *et al.*, to invoke a workflow engine. Server database triggers are specific to server databases and correspond to distinct and particular operations unique to server database query languages. Event triggers in contrast, and as disclosed in Okita *et al.*, are events, not confined by the closed universe of a server database query language that impose a transition from one state to the next. Thus, it is

09/346,194

MS126578.01/MSFTP238US

clear that Okita *et al.* fails to teach or suggest the invocation of a workflow engine using server database triggers.

Further, the Examiner concedes that Okita *et al.* fails to teach or suggest the limitation of *receiving a data modification request in the server database*, and asserts that Bacon *et al.* discloses this particular limitation. Applicants' representative contends that while Bacon *et al.* may provide "logic to receive the participant entered data and to modify the work item ... and logic to provide the modified work item to the server ..." See claim 2; Bacon *et al.* nevertheless fails to receive a modification request in the server database. Thus, for the reasons stated above with respect to Okita *et al.*, Bacon *et al.* also fails to teach or suggest the limitations as recited in the subject claims, and in particular, Bacon *et al.* fails to rectify the deficiencies identified by applicants' representative with respect to the teaching of Okita *et al.*

Accordingly, since Okita *et al.* fails to teach or suggest a substantial proportion of the limitations recited in the subject claims, and Bacon *et al.* fails to rectify of the identified deficiencies, let alone the deficiency for which the Examiner offers Bacon *et al.*, it is requested that this rejection be withdrawn with respect to independent claim 2 and 23 (and associated dependent claims).

II. Rejection of Claims 17, 19 and 20 Under 35 U.S.C. §103(a)

Claims 17, 19 and 20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Okita *et al.* in view of Rosenthal *et al.* (US 6,311,192 B1), and further in view of Hoffecker *et al.* (US 5,325,505). Withdrawal of this rejection is respectfully requested for at least the following reasons. The combination of Okita *et al.*, Rosenthal *et al.* and Hoffecker *et al.*, either individually and/or in combination, fails to teach or suggest each and every limitation set forth in the subject claims.

Independent claim 17 recites: *a server database* including a data table and an associated workflow table, wherein each row in the workflow table comprises a workflow step, and *wherein the system further includes workflow triggers defined on the data table*. The Examiner in the Final Office Action (dated August 13, 2004) claimed that Okita *et al.* taught this particular limitation. However, as discussed above with respect to independent claims 2 and 23, Okita *et al.* in particular fails to disclose a server

09/346,194

MS126578.01/MSFTP238US

database that includes a data table and a workflow table that are associated with one another. Further, as stated *supra*, Okita *et al.* fails to disclose workflow triggers defined on the data table. At best the cited document provides event triggers that initiate workflows such that an event trigger associates a particular event with one or more workflows.

In addition, the Final Office Action asserted that Okita *et al.* disclosed a workflow extended store communicatively coupled to the server database, but as was stated in applicants' response to the Final Office Action, and is reiterated herein, Okita *et al.* discloses a Call Center Database and a Local Storage Device, but the two are not communicatively coupled to each other. Rather what Okita *et al.* does show is that the Local Storage Device is coupled to a Serializer, the Serializer is coupled to both an Application Workflow Editor and an Object Management Client, the Object Management Client is coupled to an Object Management Server, and the Object Management Server is coupled to a Call Center Database. The Examiner in the Advisory Action (dated November 12, 2004) concedes that there does not exist a direct coupling between the Call Center Database and the Local Storage Device, but nevertheless maintains that there is an indirect coupling. Applicants' representative avers that the Examiner is straining the bounds of reasonableness in putting forth this argument. While applicants' representative acknowledges that there exists an indirect link between the Local Storage Device and the Call Center Database, the limitation as recited in the subject claim relates to a workflow extended store communicatively coupled to the server database. One of ordinary skill in the art would perceive such a limitation as imputing a direct connection between the Local Storage Device and the Call Center Database, not as the Examiner appears to suggest an indirect coupling through a multitude of intermediary devices.

Moreover, in the Final Office Action, the Examiner asserted that Okita *et al.* disclosed a script engine communicatively coupled to the workflow engine. As was stated in the Reply to Final Office Action, and is reiterated herein, there does not exist within the cited document either a workflow engine or a script engine, thus it is implausible for the Examiner to argue that these nonexistent entities can be coupled to one another. The Examiner nevertheless argues in the instant Advisory Action: "a workflow engine has to have instruction scripts in order to execute workflows and Okita

09/346,194

MS126578.01/MSFTP238US

et al. teaches executing workflows.” While applicants’ representative does not contest the fact that a workflow engine, if one were disclosed in Okita *et al.*, would have to have instruction scripts in order to execute workflows, the fact remains that the cited document fails to provide the workflow engine, let alone a specified script engine upon which to execute the instruction scripts. Thus, it is submitted that Okita *et al.* fails to teach or suggest this novel feature of the invention as claimed.

In order to rectify the deficiencies presented by Okita *et al.*, the Examiner offers Rosenthal *et al.* and Hoffecker *et al.* The Examiner attempts to utilize Rosenthal *et al.* to cure Okita *et al.*’s failure to disclose a server database including a data table and an associated workflow table; and Hoffecker *et al.* to rectify Okita *et al.*’s failure to divulge a workflow extended store communicatively coupled to the server database. As was stated in the Reply to Final Office Action with regard to Rosenthal *et al.*, Rosenthal *et al.* does not disclose the fact that the two tables – the data table and workflow table – reside in the server database. Rather, Rosenthal *et al.* clearly shows in Fig. 1 that two tables reside in a supplemental routine set between a SAP component and the database component, and as such both Okita *et al.* and Rosenthal *et al.* fail to disclose the limitation for which the Examiner relies upon Rosenthal *et al.* to cure.

With respect to the teachings of Hoffecker *et al.*, the Examiner asserts in the Final Office Action that it is common knowledge to couple an extended store with a server database. While applicants’ representative agrees with the Examiner that it is common knowledge to couple an extended store with a server database, and that col. 1, lines 28-30 of Hoffecker *et al.* is illustrative of this common perception, it is however, not commonly known by persons skilled in the art to couple a workflow extended store to the server database in such a way that the workflow triggers analyze a data modification request submitted to the data table and then for the workflow triggers to invoke an extended store. Thus, it is submitted that neither Okita *et al.* nor Hoffecker *et al.* disclose this exemplary feature of the invention as claimed.

In view of at least the foregoing, it is submitted that the combination of Okita *et al.*, Rosenthal *et al.* and Hoffecker *et al.*, either individually and/or in combination, does not teach or suggest each and every limitation set forth in the subject claims.

09/346,194

MS126578.01/MSFTP238US

Accordingly, this rejection with respect to independent claim 17, and associated dependent claims, should be withdrawn.

III. Rejection of Claims 21 and 22 Under 35 U.S.C. §103(a)

Claims 21 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Okita *et al.* in view of Rosenthal *et al.*, further in view of Hoffecker *et al.* and further in view of Flores *et al.* (US 6,073,109). Claims 21 and 22 depend from independent claim 17, and as discussed *supra*, the combination of Okita *et al.*, Rosenthal *et al.*, and Hoffecker *et al.* does not teach or suggest all the limitations set forth in independent claim 17. Flores *et al.* fails to make up for the aforementioned deficiencies. Accordingly, this rejection should be withdrawn with respect to independent claims 21 and 22.

IV. Rejection of Claims 4-16 and 29-39 Under 35 U.S.C. §103(a)

Claims 4-16 and 29-39 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Gabbita *et al.* (US 6,349,238 B1) in view of Du *et al.* (US 6,078,982). Reversal of this rejection is respectfully requested for at least the following reasons. The rejection is moot with respect to claims 30-39 that have been cancelled herein, and Gabbita *et al.* and Du *et al.*, either alone or in combination, fail to teach or suggest all limitations set forth in the remaining claims.

As has been stated above, applicants' claimed invention relates to a computing workflow system having process definitions represented in a workflow table. Independent claims 4, 11 and 29 recite similar claim limitations namely: a server database including a data table and an associated workflow table, the data table includes workflow triggers; a workflow extended store coupled to the server database and to the workflow triggers, the workflow triggers invoke the workflow extended store; a workflow engine coupled to the server database and to the workflow extended store; and a script engine coupled to the workflow engine.

Gabbita *et al.* discloses a workflow management system for managing and tracking new telecommunications service orders from order entry through provisioning and testing. *See* col. 1, lines 12-24. The Examiner asserts that Gabbita *et al.* provides

09/346,194

MS126578.01/MSFTP238US

substantiation for effectively all the limitations presented in the subject claims.

Applicants' representative avers to the contrary. In particular, the Examiner, in the Final Office Action (dated August 13, 2004), relies upon Gabbita *et al.*, col. 4, lines 56-64, as disclosing a workflow enabled data table, however Gabbita *et al.* at the indicated passages does not teach or suggest a workflow enabled data table, but rather a repository of data associated with the processing and tracking of orders.

The Examiner further relies on Gabbita *et al.*, col. 21, lines 52-60, to teach a workflow table that includes workflow rules and associated code. However, as was stated in the Reply to the Final Office Action, and is restated herein, the noted passage does not provide a workflow table that includes associated code. All that is apparent is that Gabbita *et al.* provides a tabular representation of workflow steps, but unlike the subject claims, the tabular representation of the workflow steps does not include associated code.

Additionally, the Examiner contends in the Final Office Action that Gabbita *et al.*, at Figs. 1A, 1B and 6, and col. 4, lines 56-64 and col. 5, lines 20-48, provides a workflow extended store coupled to the workflow enabled data table and the workflow table, the workflow extended store including extended store procedures. As has been argued above, Gabbita *et al.* does not provide the workflow enabled data table as recited in the subject claims. Consequently, it is apparent that Gabbita *et al.* cannot possibly provide a workflow extended store that is coupled to both the workflow enabled data table and the workflow table, wherein the workflow extended store includes extended store procedures.

Further, the Examiner in the Final Office Action conceded that Gabbita *et al.* fails to explicitly teach workflow triggers coupled to the data table and extended store, and indicated that Du *et al.* rectified this lack of teaching. However, it is submitted that Du *et al.* fails to overcome the aforementioned deficiencies with respect to Gabbita *et al.* upon which the Examiner places implicit reliance in relation to the other limitations presented in the subject claims. Accordingly, since Gabbita *et al.* and Du *et al.*, either alone and/or in combination, fail to teach or suggest all the limitations set forth in the subject claims, this rejection should be withdrawn with respect to independent claims 4, 11 and 29 (and claims that depend there from).

09/346,194

MS126578.01/MSFTP238US

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

AMIN & TUROCY, LLP


Anthony M. Del Zoppo
Reg. No. 51,606

AMIN & TUROCY, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731